(19) World Intellectual Property Organization International Bureau

## 

(43) International Publication Date 22 July 2004 (22,07,2004)

**PCT** 

(10) International Publication Number WO 2004/061434 A1

- (51) International Patent Classification7:
- \_\_\_\_

G01N 21/55

(21) International Application Number:

PCT/GB2003/005716

(22) International Filing Date:

31 December 2003 (31.12.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0300001.5

2 January 2003 (02.01.2003) GB

\_\_\_\_

- (71) Applicant (for all designated States except US): PACIFIC SHELF 1258 LIMITED [GB/GB]; Units 1 & 2, Brachead Business Units, Brachead Road, Linlithgow, West Lothian EH49 6EP (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): POLWART, Neil [GB/GB]; 27 Glamis Gardens, Polmont FK2 0YI (GB).
- (74) Agent: KENNEDYS PATENT AGENCY LIMITED; Floor 5 Queens House, 29 St Vincent Place, Glasgow G1 2DT (GB).

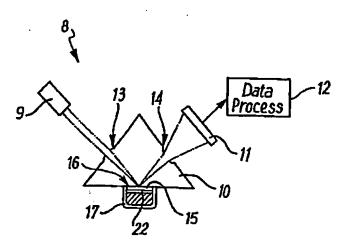
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CII, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DM, DM, DZ, EC, EE (utility model), EE, ES, FI, GB, GD, GE, GII, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW). Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO. SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SURFACE PLASMON RESONANCE SENSOR



(57) Abstract: An improved Surface Plasmon Resonance Sensor (8) is described that is compact, simple to align and cost effective to produce, thus making the device highly mobile and so ideal for field applications. These characteristics are achieved through the employment of a pre-formed cartridge (10) that provides for the required manipulation of a beam of light (2) used within the surface plasmon resonance process. The cartridge (10) is easily interchangeable and so provides a high degree of flexibility to the sensor (8). The device therefore provides a fast and simple means for the on site testing of fluids for the presence of harmful fluid borne presence of the Legionella bacteria.